

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Docket No: A-9169

Kenneth A. BRASEL et al Conf. No.: 4836

Appln. No.: 10/643,384 Group Art Unit: 1644

Filed: August 19, 2003 Examiner: Gambel, P.

For: USE OF FLT3-LIGAND IN THE TREATMENT OF INFECTION

INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR §§ 1.97 and 1.98

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

02/07/2007 BABRAHA1 00000029 10643384 01 FC:1806 180.00 OP

Sir:

In accordance with the duty of disclosure under 37 C.F.R. §1.56, Applicants hereby notify the U.S. Patent and Trademark Office of the documents which are listed on the attached PTO/SB/08 A & B (modified) form which are all the references of record in parent application Nos. 10/241,927; 09/444,027; 09/154,903; 08/725,540; 08/539,142. Each of the listed documents was cited in the parent applications. Applicants are not submitting duplicate copies of these references, but request that they be considered and listed on the face of any patent granted on the above application (see 37 C.F.R. §1.98(d)).

The present Information Disclosure Statement is being filed (without a Statement Under 37 C.F.R § 1.97(e)) after the later of three months from the application's filing date and the mailing date of the first Office Action on the merits. Therefore a check for the fee, in the amount of \$180.00 (under 37 C.F.R. § 1.17(p)) is attached.

INFORMATION DISCLOSURE STATEMENT U.S. Appln. No. 10/643,384

The submission of the listed documents is not intended as an admission that any such document constitutes prior art against the claims of the present application. Applicants do not waive any right to take any action that would be appropriate to antedate or otherwise remove any listed document as a competent reference against the claims of the present application.

Respectfully submitted,

Registration No. 30,764

Gordon Kit

SUGHRUE MION, PLLC

Telephone: (202) 293-7060 Facsimile: (202) 293-7860

WASHINGTON OFFICE

23373
CUSTOMER NUMBER

Date: February 6, 2007

Substitute for Form 1449 A & B/PTO	Compl	lete if Known	
Substitute for Form 1445 A & D/F TO	Application Number	10/643,384	
TPE INFORMATION DISCLOSURE	Confirmation Number	4836	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT	Filing Date	August 19, 2003	
- \	First Named Inventor	Kenneth A. BRASEL et al	
B 07 2007 (Use as many sheets as necessary)	Art Unit	1644	
	Examiner Name	Phillip GAMBEL	
Sheet 1 of 5	Attorney Docket Number	A9169	
PADENIA 1 Of 5			

			U.S. PA	ATENT DOCU	JMENTS
Examiner Initials*	Cite	Oite Document Number		Publication Date	
	No.1	Number	Kind Code ² (if known)	MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
		US 5,627,025		05/06/1997	Steinman et al
		US 5,635,388		06/03/1997	Bennet et al
		US 5,554,512		09/10/1996	Lyman et al
		US 6,017,544		01/2000	Srivastava et al
		US 5,626,862		05/1997	Brem et al
	-	US 5,116,964		05/26/1992	Capon et al
		US 5,185,438		02/09/1993	Lemischka et al
	V	US 5,192,553		03/09/1993	Boyse et al

FOREIGN PATENT DOCUMENTS									
Examiner	Cite	Foreign Patent Document			Publication Date	Name of Patentee or	m 1.1.6		
Initials*	No. ¹	Country Code ³	Number ⁴	Kind Code ⁵ (if known)	MM-DD-YYYY	Applicant of Cited Document	Translation ⁶		
	<u>-</u>	EP	0 627 487		05/19/1994	Lyman et al			
		WO	92/18615		10/29/1992				

		NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city, and/or country where published.					
		Sprecher et al, <i>Arch. Virol.</i> , <u>132(1-2)</u> :1-28 (1983)					
		Debets et al, <i>Immunol. Today</i> , <u>15(10)</u> :445-458 (1994)					
		Broxmeyer et al, Exp. Hematol., 23(10):1121-1129 (1995)					
		Porgador et al, J. Exp. Med., 182(1):255-260 (1995)					
	_	Lotem et al, Leukemia, 2(12 Supplemental):24S-37S (1988)					
		Bernhard et al, Cancer. Res., <u>55</u> :1099-1104 (1995)					
		Chatterjee et al, Cancer Immunol. Immunotherap., 38:75-82 (1994)					
		Boon et al, Adv. Cancer Res., <u>58</u> :177-210 (1992)					
		McBride, J. National Cancer Inst., 89(1):1257 (1997)					
		Pulendran et al, <i>J. Immunol.</i> , <u>159(5)</u> :2222-2231 (1997)	ļ				
		Shurin et al, Cell Immunol., <u>179(2)</u> :174-184 (1997)					
	-	Chen et al, Cancer Res., <u>57(16)</u> :3511-3516 (1997)					
	-	Strobl et al, <i>Blood</i> , <u>90(4)</u> :1425-1434 (1997)					
	_	Juan et al, <i>Blood</i> , <u>90(1)</u> :76-84 (1997)					
		Lynch et al, <i>Nature Med.</i> , 3(6):625-631 (1997)					
		Saunders et al, J. Exp. Med., 184(6):2185-2196 (1996)					
		Maraskovsky et al, J. Exp. Med., 184(5):1953-1962 (1996)					
	· _	Skolnick et al. <i>Trends in Biotech.</i> , <u>18(1)</u> :34-39 (2000)					
		Shaw et al, J. Immunol., 161(6):2817-2824 (1998)					

Examiner Signature	<u> </u>	Date Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²See Kind Codes of USPTO Patent Documents at www.uspto.gov, MPEP 901.04 or follow the hyperlink from the title of the document to the intranet. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST. 3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to indicate here if English language Translation is attached.

Complete if Known Substitute for Form 1449 A & B/PTO 10/643,384 **Application Number** Confirmation Number 4836 INFORMATION DISCLOSURE August 19, 2003 Filing Date STATEMENT BY APPLICANT First Named Inventor Kenneth A. BRASEL et al (use as many sheets as necessary) Art Unit 1644 Phillip GAMBEL **Examiner Name** A9169 Sheet 2 of 5 Attorney Docket Number

U.S. PATENT DOCUMENTS							
Examiner	Cite	Document N		Publication Date			
Initials*	No.1	Number	Kind Code ² (if known)	MM-DD-YYYY	Name of Patentee or Applicant of Cited Document		
		US 4,745,099		05/17/1988	Akamatsu et al		
		US 5,013,824		05/07/1991	Abrams et al		
		US 5,057,420		10/15/1991	Massey		
		US 5,061,620		10/29/1991	Tsukamoto et al		
		US 5,114,710		05/19/1992	Takaku et al		
		US 5,199,942		04/06/1993	Gillis		
		US 5,270,458		12/14/1993	Lemischka		
		US 5,283,354		02/01/1994	Lemischka		
		US 5,326,558		07/05/1994	Turner et al		
		US 5,367,057		11/22/1994	Lemischka ·		
		US 5,397,706		03/14/1995	Correa et al		
		US 5,399,493		03/21/1995	Emerson et al		
7. 7.		US 5,437,994		08/01/1995	Emerson et al		
		US 5,453,357		09/26/1995	Hogan		
		US 5,459,069		10/17/1995	Palsson et al		
7		US 5,525,708		06/11/1996	Nocka et al		
1		US 5,548,065		08/20/1996	Lemischka		
		US 5,843,423		12/01/1998	Lyman et al		

	FOREIGN PATENT DOCUMENTS									
	Cite	Cite Foreign Patent Document			Publication Date	Name of Patentee or				
	No.1	Country Code ³	Number ⁴	Kind Code ⁵ (if known)	MM-DD-YYYY	Applicant of Cited Document	Translation ⁶			
		WO	93/08268		04/29/1993					
		CA	2,163,105		05/18/1994					
		WO	94/26891		11/24/1994					
		WO	94/28391		12/08/1994					
		WO	95/00554		01/05/1995	· · · · · · · · · · · · · · · · · · ·				
		WO	93/20186	· · · · · · · · · · · · · · · · · · ·	10/14/1993					
		EP	0 563 485		03/30/1992					
		WO	96/00779		01/11/1996					

NON PATENT LITERATURE DOCUMENTS						
Examiner Cite Initials* No. 1		Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city, and/or country where published.				
		Flanagan et al, Cell, 63:185-194 (1990)				
		Cadena et al, <i>FASEB</i> , <u>6</u> :2332-2337 (1992)				
,,		Matthews et al, Cell, 65:1143-1152 (1991)				
	•	Lyman et al, <i>Onocgene</i> , <u>8</u> :815-822 (1993)				
		Rosnet et al, <i>Genomics</i> , 9:380-385 (1991)				
		Lyman et al, Cell, 75:1157-1167 (1993)				

		1
Examiner Signature	Date Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²See Kind Codes of USPTO Patent Documents at www.uspto.gov, MPEP 901.04 or follow the hyperlink from the title of the document to the intranet. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST. 3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to indicate here if English language Translation is attached.

Substitute for Form 1449 A & B/PTO	Complete if Known			
Substitute for Form 1449 A & D/F TO	Application Number	10/643,384		
INFORMATION DISCLOSURE	Confirmation Number	4836		
STATEMENT BY APPLICANT	Filing Date	August 19, 2003		
STATEMENT DI ATTEICANT	First Named Inventor	Kenneth A. BRASEL et al		
(use as many sheets as necessary)	Art Unit	1644		
•	Examiner Name	Phillip GAMBEL		

U.S. PATENT DOCUMENTS								
Examiner Cite Initials* No.1	Cita	Cita Document Num		Publication Date				
	_	Number	Kind Code ² (if known)	MM-DD-YYYY	Name of Patentee or Applicant of Cited Document			
		· - · · ·						

5

of

Sheet

3

Attorney Docket Number

A9169

FOREIGN PATENT DOCUMENTS									
Examiner Cite Initials* No. ¹	Foreign Patent Document			Publication Date	Name of Patentee or				
	Country Code ³	Number ⁴	Kind Code ⁵ (if known)	MM-DD-YYYY	Applicant of Cited Document	Translation [®]			

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city, and/or country where published.	Translation ⁶
		Maroc et al, <i>Oncogene</i> , <u>8</u> :909-918 (1993)	
		Birg et al, <i>Blood</i> , <u>80(10)</u> : 2584-2593 (1992)	
		Dosil et al, Mol. and Cell Biol., 13(10):6572-6585 (1993)	
		Hannum et al, <i>Nature</i> , 368:643-648 (1994)	
		Broxmeyer et al, <i>Blood Cells</i> , <u>20</u> :492-497 (1994)	
		de Vries et al, J. of Cell. Biochem., Suppl. 18b:177 (Abstract #H110) (1994)	
		Rossner et al, Cell Growth & Differentiation, 5:549-555 (1994)	
		Small et al, <i>Proc. Acad. Natl. Acad. Sci. USA</i> , 91:459-463 (1994)	
		Zeigler et al, <i>Blood</i> , <u>84(8)</u> :2422-2430 (1994)	
		de Vries et al, Blood., 84(10):Suppl. 1:279a (Abstract #1100) (1994)	
	, , , ,	de Vries et al, Experimental Hematology, 22(8):724 (Abstract #174) (1994)	
		Stewart et al, <i>Blood</i> , <u>81(9)</u> :2283-2289 (1993)	
		Hudak et al, Blood, <u>85(10)</u> :2747-2755 (1995)	
		Muench et al, <i>Blood</i> , <u>85(4)</u> :963-972 (1995)	
		Steinman et al, <i>Annu. Rev. Immunol.</i> , 9:271-296 (1991)	
		Macatonia et al, <i>Immunology</i> , <u>74</u> :399-406 (1991)	
		Pancholi et al, <i>Immunology</i> , <u>76</u> :217-224 (1992)	
		Inaba et al, <i>J. Exp. Med.</i> , <u>172</u> :631-340 (1990)	
		Bujdoso et al, <i>Intern. Rev. Immunol.</i> , <u>6</u> :177-186 (1990)	
		Jaffe et al, Pediatric Pathology, 13:821-837 (1993)	
		Bernstein et al, <i>Blood Cells</i> , <u>20</u> :15-24 (1994)	
		Young et al, J. Exp. Med., 182:1111-1120 (1995)	
		Inaba et al, J. Exp. Med., <u>178</u> :479-488 (1993)	
	<u> </u>	Papayannopoulo et al, <i>Blood</i> , <u>90</u> :620-329 (1997)	
		Stewart et al, <i>Blood</i> , <u>83(10)</u> :2975-2801 (1994)	
		Hanahan et al, Science, 246:1265-1275 (1989)	
		Romani et al, J. Exp. Med., 180:83-93 (1994)	

F	Date Considered	i
Examiner Signature	Date Considered	'

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²See Kind Codes of USPTO Patent Documents at www.uspto.gov, MPEP 901.04 or follow the hyperlink from the title of the document to the intranet. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST. 3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to indicate here if English language Translation is attached.

Substitute for Form 1449 A & B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet	4	of	5

	MODIFIED PTO/SB/08 A & B (08-03)					
Complete if Known						
Application Number	10/643,384					
Confirmation Number	4836					
Filing Date	August 19, 2003					
First Named Inventor ·	Kenneth A. BRASEL et al					
Art Unit	1644					
Examiner Name	Phillip GAMBEL					
Attorney Docket Number	A9169					

	U.S. PATENT DOCUMENTS									
Examiner Initials*	Cite	Document	Number	Publication Date MM-DD-YYYY						
	No.1	Number	Kind Code ² (if known)		Name of Patentee or Applicant of Cited Document					
					•					

FOREIGN PATENT DOCUMENTS								
Examiner	Cite	For	eign Patent Docu	ment	Publication Date	Name of Patentee or	Translation ⁶	
Initials*	No.1	Country Code ³	Number ⁴	Kind Code ⁵ (if known)	MM-DD-YYYY	Applicant of Cited Document	I ranslation	

	NON PATENT LITERATURE DOCUMENTS							
Examiner Initials*	Cite No. 1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city, and/or country where published.						
		Winton et al, "Recombinant Human (rh) FLT3 Ligand Plus rhGM-CSF or rhG-CSF Causes a Marked						
		CD34 ⁺ Cell Mobilization to Blood in Rhesus Monkeys", ASH Abstract (December 1996)						
		Sallusto et al, J. Exp. Med., <u>179</u> :1109-1118 (1994)						
		Szabolics et al, J. Immunol., <u>154</u> :5851-5861 (1995)						
		Rosnet et al, <i>Oncogene</i> , <u>6</u> :1641-1650 (1991)						
	-	Stengelin et al, <i>EMBO J.</i> , <u>7(4)</u> :1053-1059 (1998)						
		Small et al, <i>Blood</i> , <u>80</u> :296a (Abstract No. 1174 (1992)						
		Reid et al, J. of Immunol., 149(8):2681-2688 (1992)						
		Thomson et al, Stem Cells, 13:622-639 (1995)						
		Lyman et al, <i>Blood</i> , <u>91(4)</u> :1101-1134 (1998)						
		Ray et al, "Flt3 Ligand Supports the Differentiation of Early B Cell Progenitors in the Presence of Il-11 and IL-7", Manuscript (February 20, 1996)						
	-	Chklovskaia et al, "Increased Production of FLT3 Ligand in Leukemia Patients with Chemotherapy-						
		Included Bone Marrow Suppression", 1996 EHA Abstract Form, Second Meeting of the European Haematology Assocation (May 29-June 1, 1996)						
		Wodnar-Flipiowicz et al, "Tyrosine kinase receptors and their ligands in aplastic anemia", Manuscript (February 20, 1996)						
		Hsu et al, "Antigen-Pulsed Dendritic Cells in the Treatment of Patients with B-cell Lymphoma", Abstract #C1-314, Keystone Conference, Taos, New Mexico (March 1995)						
		Drexhage et al, "A Defective Maturation and Function of Dendritic Cells in Type I Diabetes", Abstract #C1-204, Keystone Conference, Taos, New Mexico (March 1995)						
	_	Fisch et al, "Ex Vivo Generation of Functionally Active Antigen Presenting Cell From Peripheral Blood CD34 ⁺ Hematopoietic Progenitor Cells in Cancer Patients", Abstract #C1-311, Keystone Conference, Taos, New Mexico (March 1995)						
	•	Mayordomo et al, "Bone Marrow-Derived Dendritic Cells Serve as Potent Adjuvants for Peptide-Based Anti-tumor Vaccines", Abstract #C1-213, Keystone Conference, Taos, New Mexico (March 1995)						
		Lenz et al, "MHC-Class I [†] /II ⁻ Dendritic Cells Sensitize for Transplantation Immunity", Abstract #C1-318, Keystone Conference, Taos, New Mexico (March 1995)						
		Ye et al, "Evaluation of Dendritic Cells in Allogeneic Marrow Grafts", Abstract #C1-130, Keystone Conference, Taos, New Mexico (March 1995)						

Examiner Signature	Date Con	sidered
Lixaminet Signature	Date Con	sidered
		

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). ²See Kind Codes of USPTO Patent Documents at www.uspto.gov, MPEP 901.04 or follow the hyperlink from the title of the document to the intranet. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST. 3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to indicate here if English language Translation is attached.

Substitute for Form 1449 A & B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet	4	of	4

	MODIFIED P10/SB/08 A & B (08-03)					
Complete if Known						
Application Number	10/643,384					
Confirmation Number	4836					
Filing Date	August 19, 2003					
First Named Inventor	Kenneth A. BRASEL et al					
Art Unit	1644					
Examiner Name	Phillip GAMBEL					
Attorney Docket Number	A9169					

U.S. PATENT DOCUMENTS								
Examiner Initials*	Cite No.1		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document				
7			(if known)					

	FOREIGN PATENT DOCUMENTS									
Examiner	Cite	For	eign Patent Docu	ment	Publication Date	Name of Patentee or	Turneletien ⁶			
Initials*	No.1	Country Code ³	Number⁴	Kind Code ⁵ (if known)	MM-DD-YYYY	Applicant of Cited Document	Translation			

NON PATENT LITERATURE DOCUMENTS						
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city, and/or country where published.				
		Thomson et al, "Growth of Donor-Derived Dendritic Cells from the Bone Marrow of Murine Liver Allograft Recipients in Response to Granulocyte/Macrophage Colony-Stimulating Factor", Abstract #C1-125, Keystone Conference, Taos, New Mexico (March 1995)				
		Whalen et al, "DNA-Mediated Immunization to the Hepatitis B Surface Antigen: Potential Involvement Of Interstitial Dendritic Cells", Abstract #C1-128, Keystone Conference, Taos, New Mexico (March 1995)				
		Alters et al, "Characterization and Gene Modification of Dendritic Cells to be Used for Antigen Presentation", Abstract #C1-302, Keystone Conference, Taos, New Mexico (March 1995)				

	· · · · · · · · · · · · · · · · · · ·		
Examiner Signature		Date Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). ²See Kind Codes of USPTO Patent Documents at www.uspto.gov, MPEP 901.04 or follow the hyperlink from the title of the document to the intranet. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST. 3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to indicate here if English language Translation is attached.